

Name _____
PreCalculus

Date _____
Ellipse Practice

For each question:

- a. put the equation in standard form (Show work)
- b. state the center point
- c. find and state the vertices (Show work)
- d. graph the ellipse
- e. find and state the foci (Show work)
- f. plot the foci (approximately)
- g. state the length of the major axis
- h. state the length of the minor axis

1. $9x^2 + 25y^2 - 36x - 50y + 61 = 0$

2. $x^2 + 4y^2 + 6x - 8y + 9 = 0$

3. $9x^2 + 4y^2 - 36x + 8y + 31 = 0$

4. $4x^2 + y^2 + 4y - 8x - 8 = 0$

5. $9x^2 + 4y^2 + 36x - 24y + 36 = 0$

6. $16x^2 + 25y^2 - 32x + 50y + 16 = 0$